

## PATENT COOPERATION TREATY

PCT

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

REC'D 29 NOV 2004

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Applicant's or agent's file reference 17893 PCT	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/DK 03/00816	International filing date (day/month/year) 28.11.2003	Priority date (day/month/year) 29.11.2002
International Patent Classification (IPC) or both national classification and IPC A47C27/06		
Applicant BUTTENSCH N, Per et al.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 4 sheets, including this cover sheet.
  - This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).
 These annexes consist of a total of 2 sheets.
3. This report contains indications relating to the following items:
  - I  Basis of the opinion
  - II  Priority
  - III  Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
  - IV  Lack of unity of invention
  - V  Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
  - VI  Certain documents cited
  - VII  Certain defects in the International application
  - VIII  Certain observations on the international application

Date of submission of the demand 23.06.2004	Date of completion of this report 26.11.2004
Name and mailing address of the International preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer  MacCormick, D Telephone No. +49 89 2399-7959



INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT

International application No. PCT/DK 03/00816

**I. Basis of the report**

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

**Description, Pages**

1-8 as originally filed

**Claims, Numbers**

1-7 received on 22.10.2004 with letter of 19.10.2004

**Drawings, Sheets**

1/6-6/6 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- the language of publication of the international application (under Rule 48.3(b)).
- the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- contained in the international application in written form.
- filed together with the international application in computer readable form.
- furnished subsequently to this Authority in written form.
- furnished subsequently to this Authority in computer readable form.
- The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- the description, pages:
- the claims, Nos.:
- the drawings, sheets:

**INTERNATIONAL PRELIMINARY  
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5.  This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. Statement**

Novelty (N)	Yes: Claims	1-7
	No: Claims	
Inventive step (IS)	Yes: Claims	1-7
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-7
	No: Claims	

**2. Citations and explanations**

**see separate sheet**

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/DK 03/00816

**Re Item V**

**Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

Reference is made to the following documents: D1: **GB-A-2 055 173**

The document **D1** is regarded as being the closest prior art to the subject-matter of claim 1, and shows a resilient insert comprised of springs (20-22) according to the preamble of said claim.

The subject-matter of claim 1 differs from this known resilient insert in that partial slots (4) are comprised in the springs therein.

The subject-matter of claim 1 is therefore new (Article 33(2) PCT).

The problem to be solved by the present invention may be regarded as providing a spring in which the resilient properties thereof are evenly distributed.

The solution to the problem proposed in claim 1 of the present application is considered as involving an inventive step (Article 33(3) PCT) because none of the disclosures in the available prior art documents would lead the skilled person to arrive at the differentiating subject-matter thereof.

Claims 2-7 are dependent on claim 1 and as such also meet the requirements of the PCT with respect to novelty and inventive step.

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**AMENDED PATENT CLAIMS**

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1. A resilient insert for the production of a support, such as a mattress, seat and the like, which insert may be enclosed by a cover to form a finished mattress, and where the springs are made of an elastic resin of a cross-sectional shape which at the top and at the bottom extends essentially horizontally and mutually in parallel and with wave shape extending therebetween to form the resilient element, said springs being provided with transverse slots through the entire spring, characterized in that the slot comprises through-going slots (5) as well as partial slots (4) extending therebetween which extend above from the side edges of the spring elements and a distance inwards.
2. A resilient insert according to claim 1, characterized in that each of the springs (1) comprises a single wave with two bending lines (8, 9) to receive the vertical movability, and is provided with locking means at the top (2, 3) and at the bottom (10, 11) to join adjacent springs (1) and thereby to form the complete spring insert.
3. A resilient insert according to claims 1 and 2, characterized in that a groove (7) is provided along the upper side along one side edge to receive the horizontal movability.
4. A resilient insert according to claim 2, characterized in that the locking means respectively comprise a tongue and a groove at each side edge at the top and at the bottom, said tongue (15) having barbs (15a) to be pressed into receiving tracks (16a) in the groove (16) (fig. 8).

5. A resilient insert according to claim 2, characterized in that the locking means respectively comprise a plurality of upwardly facing pins (17) on the tongue to engage with a plurality of cooperating holes (18) in the groove (fig. 4).

6. A resilient insert according to claims 2-5, characterized in that a channel (13) is provided along the lower side to receive a carrier (12) which constitutes the carrying element in the support.

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7. A resilient insert according to claim 5, characterized in that the channel (13) partially encloses the rail (12), and that it is through-going uninterrupted on the lower side (14).